



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,232	07/24/2003	Tushar Raval	CE09386R	1289

22917 7590 11/29/2006

MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

EXAMINER

PEREZ, JULIO R

ART UNIT	PAPER NUMBER
----------	--------------

2617

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,232

Applicant(s)

RAVAL ET AL.

Examiner

Julio R. Perez

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 17, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 13-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mustajarvi et al. (hereinafter Mustajarvi), US Patent number 6,661,782.

Regarding claim 1, Mustajarvi discloses in a packet data communication system comprising a source base station subsystem (BSS), a target BSS, and a mobile station serviced by the source BSS, a method for detecting a cell reselection without an intervention of a Serving GPRS Support Node (SGSN) comprising: in response to receipt of the communication channel allocation request, allocating a communication channel at the target BSS to the mobile station (col. 5, lines 4-12, a request is received for a channel allocation); informing the mobile station of the allocated communication channel (col. 5, lines 17-21, the mobile station needs to acknowledge receipt of message indicating a transfer to a new channel); receiving, by the target BSS from the mobile station, first uplink data that includes a mobile station identifier associated with the mobile station (col. 5, lines 13-24; col. 8, lines 34-41, the mobile responds to the BSS by sending information about its new position in regards to its cell location); and determining, based on the first uplink data and by reference to the record, that the mobile station has initiated a cell reselection (col. 5, lines 4-24; col. 9, lines 66-67-col. 10, lines 1-27); receiving second

Art Unit: 2617

uplink data from the mobile station (col. 5, lines 20-41); routing the second uplink data to the SGSN (col. 5, lines 20-41); and determining, by the SGSN and based on the second uplink data, that the mobile station has initiated a cell reselection (col. 5, lines 20-41; col. 10, lines 1-39).

What Mustajarvi does not specifically disclose is that the method is implemented to maintain a record of at least one active mobile station and receiving, from a mobile station of the at least one active mobile station, a message requesting allocation of a communication channel at the target BSS. However, Mustajarvi strongly suggest the establishment of communication link between the mobile and base station; hence, indication for a requirement of channel allocation in order to keep a secure connection.

At the time of the invention, it would have obvious to one of ordinary skill in the art to modify the system as taught by Mustajarvi as it is known to implement systems with keeping records of mobile stations and allocating channels for visiting mobiles.

Regarding claims 2, 14, Mustajarvi as applied above discloses, upon determining that the mobile station has initiated a cell reselection, removing data stored in a buffer associated with the mobile station and the source base station subsystem (col. 5, lines 14-24; col. 10, lines 29-26).

Regarding claims 3, 15, Mustajarvi as applied above discloses, wherein the step of removing data comprises a step of deleting data stored in a buffer associated with the mobile station and the source base station subsystem (col. 10, lines 29-26).

Regarding claims 4, 17, Mustajarvi as applied above discloses, further comprising a step of, upon determining that the mobile station has initiated a cell reselection, terminating an allocation of a communication channel to the mobile station at the source base station subsystem (col. 10, lines 29-26).

Regarding claims 5, 18, Mustajarvi as applied above discloses, further comprising a step of acknowledging the uplink data (col. 5, lines 14-24).

Regarding claim 6, 19, Mustajarvi as applied above discloses, wherein the second uplink data does not include the mobile station identifier included in the first uplink data (col. 10, lines 7-26).

Regarding claim 16, Mustajarvi as applied above discloses the buffer associated with the mobile station and with a source base station subsystem comprises a first buffer and wherein the processor removes data from the buffer by transferring the data to a second buffer associated with the mobile station and with the target base station subsystem (col. 10, 19-41).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 8-12, 20-23, are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al. (hereinafter Cheng), [2003/0224774].

Regarding claim 8, Cheng discloses, in a packet data communication system comprising a source base station subsystem (BSS), a target BSS, and a mobile station serviced by the source BSS, a method for detecting a cell reselection without an intervention of a Serving GPRS

Art Unit: 2617

Support Node (SGSN) comprising steps of: maintaining a record of at least one active mobile station (0006-0010); receiving, from a mobile station of the at least one active mobile station, a message requesting allocation of a communication channel at the target BSS (0006, 0010, a request for channel allocation is received); in response to receipt of the communication channel allocation request, allocating a communication channel at the target BSS to the mobile station (0006, 0010); informing the mobile station of the allocated communication channel (0010); initiating a count down of a predetermined time period (0010, lines 17-22, 41-50); and when no uplink data is received via the source BSS after the initiation of the count down and prior to the expiration of the predetermined time period, determining that the mobile station has performed a cell reselection (0006, 0010-0011).

Regarding claim 9, Cheng discloses, further comprising a step of when uplink data is received via the source base station subsystem after the initiation of the count down and prior to the expiration of the predetermined time period, determining that the mobile station is still serviced by the source base station subsystem (0006, 0010-0011).

Regarding claim 10, Cheng discloses, further comprising a step of, when no uplink data is received via the source BSS after the initiation of the count down and prior to the expiration of the predetermined time period, removing data from a buffer associated with the mobile station and the source BSS (0006, 0010-0011).

Regarding claim 11, Cheng discloses, wherein the step of removing data comprises a step of deleting data stored in a buffer associated with the mobile station and the source base station subsystem (0011).

Art Unit: 2617

Regarding claim 12, Cheng discloses, further comprising a step of, when no uplink data is received via the source base station subsystem and the initiation of the count down and prior to the expiration of the predetermined time period, terminating an allocation of communication resources to the mobile station at the source base station subsystem (0006, 0010-0011).

Regarding claim 20, Cheng discloses, a packet control unit comprising: a memory device that maintains a record of at least one active mobile station (0006-0010); a timer (0010, lines 17-22, 41-50); and a processor operably coupled to each of the memory device and the timer that receives, from a mobile station of at least one active mobile station (0006, 0010-0011), a message requesting allocation of a communication channel at a target base station subsystem (BSS) (0006, 0010-0011), allocates a communication channel at the target BSS to the mobile station (0006, 0010-0011), initiates a count down of a predetermined time period with reference to the timer and (0006, 0010-0011), when no uplink data is received by the packet control unit via the source base station subsystem after the initiation of the count down and prior to the expiration of the predetermined time period, determines that the mobile station has performed a cell reselection (0006, 0010-0011).

Regarding claim 21, Cheng discloses, wherein, when uplink data is received via a source base station subsystem after the initiation of the count down and prior to the expiration of the predetermined time period, the processor further determines that the mobile station is still serviced by the source base station subsystem (0006, 0010-0011).

Regarding claim 22, Cheng discloses, wherein, when no uplink data is received via the source base station subsystem after the initiation of the count down and prior to the expiration of

Art Unit: 2617

the predetermined time period, the processor further removes data from a buffer associated with the mobile station and the source base station subsystem (0006, 0010-0011).

Regarding claim 23, Cheng discloses, wherein a when no uplink data is received via the source base station subsystem after the initiation of the count down and prior to the expiration of the predetermined time period, the processor further causes a termination of an allocation of communication resources to the mobile station at the source base station subsystem (0006, 0010-0011).

Response to Arguments

5. Applicant's arguments with respect to claims 1-6, and 13-19, have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments in regards to claims 8-12 and 20-23 filed September 11, 2006 have been fully considered but they are not persuasive.

Regarding claim 8, applicant argues that Cheng does not teach any determination that the mobile station has handed off to a different cell based on an expiration of transfer period (see, for example, page 8, third paragraph to page 9 of the response filed September 11, 2006). Applicant presents the aforementioned allegation throughout the full body of the remarks.

In response, it should be noted, as indicated in the rejection, that in numerous occasions, Cheng teaches that after a request for a new connection to another cell, the mobile uses the new channel to transmit data and retransmissions (data) to the new cell and during the expiration of delay or time given for the transfer from one cell to another; see, paragraph 0010, lines 6-22.

Art Unit: 2617

This teaching clearly indicates the transfer of data during a period of time and during the handoff to a new area.

Regarding claim 20, applicant argues that Cheng does not teach packet control (see, for example, page 8, third paragraph to page 9 of the response filed September 11, 2006).

In response, it should be noted, as indicated in the rejection, Cheng teaches that controlling packets fro transferring to the new cell during handoff; see, paragraph 0010, lines 6-27.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Art Unit: 2617

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R. Perez whose telephone number is (571) 272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William H. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Julio R Perez
Examiner
Art Unit 2617


1/1/22/06


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600